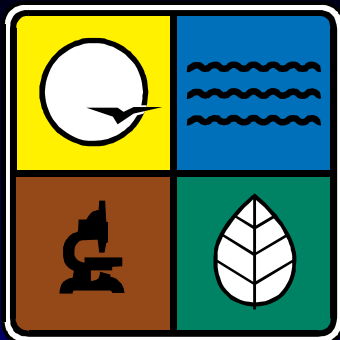


# TMDL UPDATE



Missouri Department  
of Natural Resources

# **2002 303(d) List**

- **Comment Period Extended to August 15th**
- **Requests to List & De-List Specific Waterbodies**
- **Sediment Listing Issues**
- **New Data Supporting De-Listing of Waterbodies Not Proposed in the Original 303(d) Submission Will Not be Considered**

# TMDL Process

## Set Schedule

- **Availability of Data**
- **Priority Ranking**
- **Schedule in MOU**



# **TMDL Process**

## **Data Assessment and Collection**

- **Assessment of Existing Data**
- **Schedule Needed Monitoring Two Years in Advance of TMDL**
- **Complete QAPP for ESP or Contract with External Entity for Monitoring**
- **Enter or Download Acceptable Data into Electronic Data Management System**

# **TMDL Process**

## **Complete TMDL Information Sheet**

- **Describes the Water Quality Impairment in Easily Understood Terms**
- **Includes Summary of Data Used for 303(d) Listing**

## **Start Public Participation Process**



# TMDL Process

## Modeling & TMDL Calculation



- **Evaluate Models & Determine Appropriate Model for Situation**
- **Perform Two Model Runs - One to Derive Target and Other to Verify Target**
- **Prepare Maps, Graphs, Tables for TMDL Document**
- **Help Revise TMDL Document in Response to EPA & Public Comments**

# **TMDL Process**

**Draft TMDL Document**

**Submit Draft to EPA for Review**

**TMDL Placed on 30 Day Public Notice**

**Track Comments, Prepare Responses  
and Incorporate Appropriate  
Comments into Document**

**Send Final TMDL to EPA for Approval**

**Track Implementation & Post  
Implementation Monitoring**

# **Elk River TMDL (11)**

- **Three Partnership Meetings Held - Meeting on June 24**
- **Using Load Duration Curve & Verification with SWAT**
- **Preliminary P Target of 0.05 mg/L Based on Historic Data Prior to 1985**
- **Funding for Monitoring?**
- **Need Representation From More Interests on Watershed Partnership**



# **Elk River - AR & MO**

- **Joint Efforts between AR and MO -  
Monitoring  
Point Source Control  
Public Meeting/Awareness Effort**
- **New AR Legislation  
Registration of Poultry Producers  
Poultry Litter Utilization**
- **Bentonville Wastewater Plant  
De-nitrification  
P Removal to 1.0 mg/L**

# **Jacks Fork TMDL (1)**

- **Three Public Meetings -  
Meeting on July 10**
- **Good Participation from Interests**
- **Preliminary Target - Geomean of 21-30  
colonies/100 mL + Standard of 200  
colonies/100 mL**
- **DNR Turning Over Partnership  
Process to Extension and Local  
Citizens**

# Consent Decree Schedule for TMDL Development

Calendar Year	TMDLs Required this Year	Cumulative TMDLs Required	TMDLs Completed this year	Cumulative TMDLs Completed	Status re Consent Decree
2000	13	13	14	14	+1
2001	9	22	10	24	+2
2002	6	28	3	28	=
<b>2003</b>	<b>34</b>	<b>62</b>	<b>11*</b>	<b>39</b>	<b>-23</b>
2004	21	83			
2005	39	122			
2006	12	134			
2007	8	142			
2008	10	152			
2009	22	174			

\* EPA Proposed De-Listings for 2002 303(d) List

# **2004 TMDL Schedule**

- **2nd Nicholson - Sulfate from AML**
- **Big Otter Creek - pH from AML**
- **Chat Creek - Zinc from AML**
- **Big River (2) - Lead from AMLs**
- **Big Creek - Metals from Smelter**
- **Flat River Creek - Metals from Tailings**
- **Shaw Branch - Metals from AML**

# **2004 TMDL Schedule**

- **Hinkson Creek - Unknown from NPS**
- **Lamar Lake - Nutrients from Ag**
- **Spring Fork Lake - Nutrients from Ag**
- **Mussel Fork - Sediment from Ag**
- **Smithville Lake - Atrazine from Ag**
- **Trib to Big Otter Creek - pH from Mining**
- **Turkey Creek - BOD/NFR from Bonne Terre**

# **2004 TMDL Schedule**

## **Possibilities to Meet Consent Decree #'s**

### **Point Sources**

- **St. Francis River**
- **Main Ditch**

### **Atrazine**

- **LaBelle Lake #2**
- **Vandalia Lake**
- **Monroe City Route J**